- 54 -CLAIMS 0 1. Α method of regulating adenovirus packaging comprising the steps of: a. obtaining an adenovirus vector containing a repressor binding site; propagating b. said vector in the 5 absence of said repressor; and repressing packaging of said vector in the presence of repressor. 10 2. The method of claim 1 wherein the repressor is COUP-TF. method of claim 1 3. The wherein the repressor is lac repressor. 15 The method according to claim 1 wherein the propagating step occurs in a first cell line and the repressing step occurs in a second cell line. 20 5. The method of claim 1 wherein the repressing step occurs in a cell line is coinfected with a vector expressing the repressor. 25 adenovirus comprising An vector adenovirus packaging sequence containing a plurality of COUP-TF binding sites. 30 7. An adenovirus vector comprising adenovirus packaging sequence having at least two copies of 5'-TTTGN<sub>8</sub>CG-3' (SEQ ID NO:1) and a plurality of COUP-TF binding sites. 35

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8. An adenovirus vector according to claims 0 further comprising a heterologous gene for expression in a host.

A method of treating patients comprising the step of:

administering an adenovirus vector that was prepared using the adenovirus vector of claim 8 wherein the heterologous gene expresses а therapeutically effective amount of a protein.

- 10. An adenovirus vector containing packaging signal sequence consisting of at least two copies of  $5'-TTTGN_8CG-3'$  (SEQ ID NO:1).
- 11. An adenovirus vector according to claim 10 wherein a repressor binding site is embedded in the packaging signal sequence.

12. An adenovirus vector according to claim 10 wherein repressor binding sites flank the packaging signal sequence.

25 An adenovirus vector according to claim 10 wherein repressor binding sites alternate with the packaging signal sequence.

30 An adenovirus vector according to claim 10 having 3-12 packaging signal sequences.

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